

**What is Claimed is:**

1. A method for processing video data, the method comprising:  
receiving a block of current video data in a first format;  
encoding the block of current video data using data stored in a second format;  
5 storing new data in the second format; and  
storing the encoded video data.
2. The method of Claim 1, wherein the stored data contains information  
about a previous frame.
- 10 3. The method of Claim 1, wherein the stored data contains image data  
from a previous frame.
4. The method of Claim 1, wherein the block of current video data in the  
15 first format is a portion of a current frame.
5. The method of Claim 1, wherein the stored data in the second format is  
a portion of a previously coded frame.
- 20 6. The method of Claim 1, wherein the second format has a lower  
resolution than the first format.
7. The method of Claim 6, wherein the second format comprises reduced  
chrominance information as compared to the first format.
- 25 8. The method of Claim 5, wherein the second format comprises  
interleaved chrominance and luminance data.
9. The method of Claim 4, wherein the first format comprises interleaved  
30 chrominance and luminance data.
10. The method of Claim 4, wherein the first format and the second format  
comprises interleaved chrominance and luminance data.

11. The method of Claim 1; wherein each block of a video frame comprises a predefined grouping of pixels.

12. The method of Claim 1, wherein encoding the block of the current video frame comprises compressing the block of the current video frame.

13. The method of Claim 1, wherein encoding the block of the current video frame comprises comparing the block of the current video frame to a corresponding block of another video frame.

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14. The method of Claim 13, wherein comparing the block of the current video frame to a corresponding block of another video frame is preceded by: retrieving the corresponding block of the other video frame in the second format.

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15. The method of Claim 1, further comprising: transferring the new data in the second format to a memory location; and storing the new data for encoding of a corresponding block of a subsequent video frame.

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16. The method of Claim 15, further comprising: storing the encoded video data in a third format in a buffer; and transferring the buffered data to a memory location on completion of encoding the block.

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17. The method of Claim 16, further comprising: transferring a portion of the block of video data from the buffer to the memory location if the buffer is full prior to encoding the entire block of video data.

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18. The method of Claim 1, further comprising: transmitting the encoded block of the current video frame over a wireless communications link.

19. The method of Claim 1, wherein encoding the block of current video data using the data stored in the second format is preceded by converting a block of a data in the first format to the second format.

5           20. The method of Claim 1, wherein the block of current video data comprises a microblock line of video data.

21. A communications device comprising:  
a controller that is configured to receive a block of current video data in a first  
10 format, to encode the block of current video data using data stored in a second format, to store new data in the second format, and to store the encoded video; and  
a transmitter that is configured to transmit the encoded video data.

22. The communications device of Claim 21, wherein the second format  
15 has a lower resolution than the first format.

23. The communications device of Claim 22, wherein the second format comprises interleaved chrominance and luminance data.

20           24. The communications device of Claim 21, wherein the controller encodes the block of the current video frame by compressing the block of the current video frame.

25. The communications device of Claim 21 further comprising:  
25 a buffer that receives the video data; and  
a memory location for storing encoded video data;  
wherein the controller is further configured to transfer the new data in the second format from the buffer to the memory location, and to encode a corresponding block of a subsequent video frame using new data in the second format from the  
30 memory location.

26. The communications device of Claim 25, wherein the controller is further configured to transfer a portion of the block of video data from the buffer to

the memory location if the buffer is full prior to encoding the entire block of video data.

27. A computer program product for processing video data, comprising:  
5 a computer readable media having computer readable program code embodied therein, the computer readable program code comprising:  
computer readable program code configured to receive a block of current video data in a first format;  
computer readable program code configured to encode the block of current  
10 video data using data stored in a second format;  
computer readable program code configured to store new data in the second format; and  
computer readable program code configured to store the encoded video data.

15 28. The computer program product of Claim 27, wherein the second format has a lower resolution than the first format.

29. The computer program product of Claim 28, wherein the second  
format comprises interleaved chrominance and luminance data.

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30. The computer program product of Claim 27, wherein the computer  
readable program code to encode the block of the current video frame further  
comprises computer readable program code to compress the block of the current video  
frame.

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31. The computer program product of Claim 27 further comprising:  
computer readable program code configured to transfer the new data in the  
second format from a buffer to a memory location;  
computer readable program code configure to encode a corresponding block of  
30 a subsequent video frame using the new data in the second format in the memory  
location.

32. The computer program product of Claim 31, further comprising  
computer readable program code configured to transfer a portion of the block of video

data from the buffer to the memory location if the buffer is full prior to encoding the entire block of video data.

5           33.     A system for processing video data, the system comprising:  
              means for receiving a block of current video data in a first format;  
              means for encoding the block of current video data using data stored in a  
second format;  
              means for storing new data in the second format; and  
              means for storing the encoded video data.

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              34.     The system of Claim 33, wherein the second format has a lower  
resolution than the first format.

              35.     The system of Claim 34, wherein the second format comprises  
15   interleaved chrominance and luminance data.

              36.     The system of Claim 33, wherein the means for encoding further  
comprises means for compressing the block of the current video frame.

20           37.     The system of Claim 33, further comprising:  
              means for transferring the new data in the second format from a buffer to a  
memory location;  
              means for encoding a corresponding block of a subsequent video frame using  
the new data in the second format in the memory location.

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              38.     The system of Claim 33, further comprising means for transferring a  
portion of the block of video data from the buffer to the memory location if the buffer  
is full prior to encoding the entire block of video data.